

### **REMARKS**

Reconsideration of this application, as amended, is respectfully requested. The Applicants wish to draw the Examiner's attention to the applicants' related co-pending applications and issued patents (see updated Appendix A) directed to nanoparticles and methods of preparation and use thereof.

The Applicants note that the Examiner did not return executed PTO 1449 forms for the Supplemental IDS hand-delivered to the Examiner on February 9, 2002 and 6<sup>th</sup> Supp. IDS that was hand-delivered to the Examiner on September 9, 2002. Attached copies of PTO stamped post-cards show that the Patent Office did receive both, PTO-1449 forms and cited references. The Applicants request that the Examiner fully execute the PTO 1449 forms for the Supplemental and 6<sup>th</sup> Supp. IDSs and return a copy of the executed PTO 1449 forms to the undersigned representative. Copies of the Supplemental IDS and 6<sup>th</sup> Supp. IDSs, and associated PTO 1449 forms are attached. The Examiner is requested to contact the undersigned representative if the Examiner would like to have another copy of the references.

Claims 433-476 were pending in this application. Claims 433-439, 447-453, 475 and 476 were rejected under 35 U.S.C. section 103(a) as being unpatentable over Yguerabide et al. U.S. Patent No. 6,214,560. Claims 440-446 and 454-474, however, were deemed to be allowable if placed into independent format. In order to expedite prosecution, claim 433 was amended, claim 440 was cancelled, and claim dependencies and/or informalities were corrected without prejudice to future prosecution, without disclaimer of any subject matter, and without acknowledgement or presumption that the amendments are in any way related to patentability. Support for the amendment of claim 433 can be found in cancelled claim 440. Accordingly, no new matter is introduced by the instant amendments.

The Applicants respectfully request entry of this response. The response (including amendment) does not raise any new issues that would require an additional search or create any unreasonable burden on the Examiner. The Applicants respectfully submit that all of the claims in this application are in allowable condition and request a Notice to this effect.

Reconsideration of this application is respectfully requested and a favorable determination is earnestly solicited. The Examiner is invited to contact the undersigned

representative if the Examiner believes that this would be helpful in expediting the prosecution of this application.

Respectfully submitted,



Dated: March 19, 2004

Emily Miao  
Reg. No. 35,285

McDonnell Boehnen  
Hulbert & Berghoff LLP  
300 South Wacker Drive, Suite 3200  
Chicago, IL 60606  
Telephone: 312-913-0001  
Facsimile: 312-913-0001

**APPENDIX A**

<b>ATTY Case No.</b>	<b>Serial No./ Filing Date</b>	<b>Inventors/Title</b>	<b>Status</b>
<b>00-653-A</b>	U.S. 09/927,777 Filed 8/10/01	Mirkin, Letsinger, Mucic, Storhoff, Elghanian, Taton, Garamella, Li, Park/ NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFORE	ALLOWED
<b>00-713-B1</b>	09/923,625 Filed 8/7/01	Mirkin, Letsinger, Mucic, Storhoff, Elghanian/ NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFOR	ALLOWED
<b>00-713-C</b>	09/344,667, filed 6/25/99	Mirkin, Letsinger, Mucic, Storhoff, Elghanian/ NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFORE	U.S. Patent No. 6,361,944, issued 3/26/02
<b>00-713-I</b>	U.S.S.N 09/603,830 Filed 6/26/00	Mirkin, Letsinger, Mucic, Storhoff, Elghanian, Taton; NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFOR	U.S. Patent No. 6,506,564, issued 1/14/03
<b>00-713-I-1</b>	09/961,949 9/20/01	Mirkin, Letsinger, Mucic, Storhoff, Elghanian, Taton;	U.S. Patent No. 6,582,921, issued June 24, 2003

ATTY Case No.	Serial No./ Filing Date	Inventors/Title	Status
		NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERE TO AND USES THEREFOR	
00-713-I-2	09/957,318 9/20/01	See 00-713-I-1	ALLOWED
00-713-I-3	09/957,313 9/20/01	See 00-713-I-1	U.S. Patent No. 6,645,721, issued 11/11/03
00-713-I-4	09/966,491 9/28/01	See 00-713-I-1	U.S. Patent No. 6,610,491, issued August 26, 2003
00-713-I-5	09/966,312 9/28/01	See 00-713-I-1	U.S. Patent No. 6,673,548, issued January 6, 2004
00-713-I-6	09/967,409 9/28/01	See 00-713-I-1	ALLOWED
00-713-I-7	09/974,500 10/10/01	See 00-713-I-1	ALLOWED
00-713-I-8	09/974,007 10/10/01	See 00-713-I-1	PENDING
00-713-I-9	09/973,638 10/10/01	See 00-713-I-1	PENDING
00-713-I-10	09/973,788 10/10/01	See 00-713-I-1	ALLOWED
00-713-I-11	09/975,062 10/11/01	See 00-713-I-1	U.S. Patent No. 6,677,122, issued January 13, 2004
00-713-I-12	09/975,376 10/11/01	See 00-713-I-1	PENDING
00-713-I-13	09/975,384 10/11/01	See 00-713-I-1	PENDING

<b>ATTY Case No.</b>	<b>Serial No./ Filing Date</b>	<b>Inventors/Title</b>	<b>Status</b>
<b>00-713-I-14</b>	09/975,498 10/11/01	See 00-713-I-1	ALLOWED
<b>00-713-I-15</b>	09/975,059 11/11/01	See 00-713-I-1	ALLOWED
<b>00-713-I-16</b>	09/976,601 10/12/01	See 00-713-I-1	PENDING
<b>00-713-I-17</b>	09/976,968 10/12/01	See 00-713-I-1	PENDING
<b>00-713-I-18</b>	09/976,971 10/12/01	See 00-713-I-1	U.S. Patent No. 6,682,895, issued 1/27/04
<b>00-713-I-19</b>	09/976,863 10/12/01	See 00-713-I-1	PENDING
<b>00-713-I-20</b>	09/976,577 10/12/01	See 00-713-I-1	ALLOWED
<b>00-713-I-21</b>	09/976,618 10/12/01	See 00-713-I-1	ALLOWED
<b>00-713-I-22</b>	09/981,344 10/15/01	See 00-713-I-1	ALLOWED
<b>00-713-I-23</b>	09/976,900 10/12/01	See 00-713-I-1	PENDING
<b>00-713-I-24</b>	09/976,617 10/12/01	See 00-713-I-1	ALLOWED
<b>00-713-I-25</b>	09/976,378 10/12/01	See 00-713-I-1	PENDING
<b>00-713-i-26</b>	10/410,324 04/10/03	See 00-713-I-1	PENDING
<b>00-713-L</b>	U.S.S.N. 09/693,005 Filed 10/20/00	Mirkin, Letsinger, Mucic, Storhoff, Elghanian/ NANOPARTICLES HAVING OLIGONUCLEOTI	U.S. Patent No. 6,495,324, issued 12/17/02

ATTY Case No.	Serial No./ Filing Date	Inventors/Title	Status
		DES ATTACHED THERETO AND USES THEREFORE	
00-713-M	U.S.S.N. 09/693,352 Filed 10/20/00	Mirkin, Letsinger, Mucic, Storhoff, Elghanian/ NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFORE	U.S. Patent No. 6,417,340, issued 7/9/02
00-714-G	U.S. 09/830,620 Filed 8/15/01	Mirkin, Nguyen/ NANOPARTICLES WITH POLYMER SHELLS	PENDING
00-715-A	U.S. 09/760,500 Filed 1/12/01	Mirkin, Letsinger, Mucic, Storhoff, Elghanian, Taton; Garamella, Li/ METHOD OF ATTACHING OLIGONUCLEOTI DES TO NANOPARTICLES AND PRODUCTS PRODUCED THEREBY	ALLOWED
00-1085-A	U.S.S.N. 09/820,279 Filed 3/28/01	Mirkin, Letsinger, etc./ METHOD AND MATERIALS FOR ASSAYING BIOLOGICAL MATERIALS	ALLOWED
00-1085-G	U.S.S.N. 10/640,618 Filed 8/13/03	Mirkin, Letsinger, etc./ METHOD AND MATERIALS FOR ASSAYING BIOLOGICAL MATERIALS	
00-1086-A	U.S. 09/903,461 Filed 7/11/01	Letsinger, Garimella/ METHOD OF DETECTION BY ENHANCEMENT	U.S. Patent No. 6,602,669, Filed 8/5/03

ATTY Case No.	Serial No./ Filing Date	Inventors/Title	Status
		OF SILVER STAINING	
00-1272-C	U.S.S.N. 10/008,978 Filed 12/7/01	Mirkin, Letsinger, Mucic, Storhoff, Elghanian, Taton, Garimella, Li, Park, Lu/ NANOPARTICLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREOF	PENDING
01-565-A	USSN 10/125,194 Filed 4/18/02	Mirkin, Nguyen, Watson, Park/ OLIGONUCLEOTI DE-MODIFIED ROMP POLYMERS AND CO- POLYMERS	PENDING
01-599-A	U.S.S.N. 10/291,291 Filed 11/08/02	Storhoff/NOVEL THIOL-BASED METHOD FOR ATTACHING OLIGONUCLEOTI DES TO NANOPARTICLES	PENDING
01-661-A	U.S.S.N. 10/034,451 Filed 12/28/01	Mirkin, Cao, Jin/ DNA-MODIFIED CORE-SHELL AG/AU NANOCRYSTALS	PENDING
01-661-C	U.S.S.N. 10/153,483 Filed 5/22/02	Mirkin, Cao, Jin/ DNA-MODIFIED CORE-SHELL AG/AU NANOCRYSTALS	PENDING
01-661-E	U.S.S.N. 10/397,579 3/26/03	Mirkin, Cao, Jin/ DNA-MODIFIED CORE-SHELL AG/AU NANOCRYSTALS	PENDING
01-1565-A	U.S.S.N. 10/266,983	Park, Taton, Mirkin/ARRAY-	PENDING

ATTY Case No.	Serial No./ Filing Date	Inventors/Title	Status
	Filed 10/08/02	BASED ELECTRICAL DETECTION OF DNA USING NANOPARTICLE PROBES	
01-1633-A	U.S.S.N. 10/266,983 Filed 10/8/02	Park, Taton, Mirkin/NANOPARI CLES HAVING OLIGONUCLEOTI DES ATTACHED THERETO AND USES THEREFOR	PENDING
01-1705-A	U.S.S.N. 10/108,211 Filed 3/27/02	Nam, Park, Mirkin/BIO- BARCODES BASED ON OLIGONUCLEOTI DE-MODIFIED NANOPARTICLES	PENDING
02-338-B	USSN 10/172,428 Filed 6/14/02	Cao, Jin, Nam, Mirkin/MULTICHA NNEL DETECTION USING NANOPARTICLE PROBES WITH RAMAN SPECTROSCOPIC FINGERPRINTS	PENDING
02-338-C	10/431,341 5/7/03	Cao, Jin, Nam, Mirkin/MULTICHA NNEL DETECTION USING NANOPARTICLE PROBES WITH RAMAN SPECTROSCOPIC FINGERPRINTS	PENDING